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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,664	07/31/2003	Charles D. Combs	113692CON-1 (ATT.0020002)	7920
7590 07/15/2004 Duane S. Kobayashi, Esq. 1325 Murray Downs Way Reston, VA 20194			EXAMINER PHAN, HANH	
			ART UNIT 2633	PAPER NUMBER

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,664	Applicant(s) COMBS ET AL.	
	Examiner Hanh Phan	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-41, 43-48 and 51-66 is/are rejected.
- 7) ☒ Claim(s) 42, 49 and 50 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/08/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 37-40, 43-47, 51-54 and 57-66 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 6,751,417 (Combs et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because the limitations recited in claims 37-40, 43-47, 51-54 and 57-66 of the instant application are encompassed by claims 1-8 of U.S. Patent No. 6,751,417 (Combs et al).

Regarding claims 37-40, 46, 47, 51-54 and 62-64, Combs discloses a communication system, comprising:

a mux node including a first lightwave interface device for communication with a head end, the mux node further including a second lightwave interface device for

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transmitting a plurality of optical signals, wherein at least two of the optical signals include both analog and digital signals; and

a mini fiber node including a third lightwave interface device for receiving the optical signal from the second lightwave interface device of the mux node, the mini fiber node being further configured to communicate analog and digital signals to end user equipment via a wired connection (see claims 1-8 of Combs).

Regarding claims 43, 59 and 65, Combs discloses the wired connection is a coaxial cable (see claims 1-8 of Combs).

Regarding claims 44, 57, 60 and 66, Combs discloses the mini fiber node receives digital signals, and analog signals that include TV broadcast signals, wherein the digital signals are transmitted on the coaxial cable in a first frequency band, and the analog signals are transmitted on the coaxial cable in a second frequency band (see claims 1-8 of Combs).

Regarding claims 45, 58 and 61, Combs discloses the first frequency band is 800-880 MHz and the second frequency band is 50-750 MHz (see claims 1-8 of Combs).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 37-41, 43, 44, 46-48, 51-56 and 59 are rejected under 35 U.S.C. 102(e) as being anticipated by Lu et al (U.S. Patent No. 5,880,865) cited by applicant.

Regarding claims 37-40, 46, 47 and 51-56, referring to figure 6, Lu teaches a communication system, comprising:

a mux node (602) including a first lightwave interface device (603) for communication with a head end (i.e., CO-600), the mux node (602) further including a second lightwave interface device (604, 605) for transmitting a plurality of optical signal including analog and digital signals; and

a mini fiber node (ONU1-ONU_n) including a third lightwave interface device (611) for receiving the optical signal from the second lightwave interface device of the mux node, the mini fiber node (ONU1-ONU_n) being further configured to communicate analog and digital signals to end user equipment via a wired connection (col. 4, lines 58-67, col. 5, lines 1-16, and from col. 2, line 54 to col. 4, line14).

Regarding claims 41 and 48, Lu further teaches the mux node includes a wavelength division multiplexing component that enables communication of analog and digital downstream signals from said head end, and an optical sputter for splitting the analog downstream signal into a plurality of analog signals corresponding to a plurality of mini fiber nodes (Fig. 6).

Regarding claims 43 and 59, Lu further teaches the wired connection is a coaxial cable (Fig. 1).

Regarding claim 44, Lu further teaches the mini fiber node receives digital signals, and analog signals that include TV broadcast signals, wherein the digital signals are transmitted on the coaxial cable in a first frequency band, and the analog signals are transmitted on the coaxial cable in a second frequency band (Figs. 6 and 7).

Allowable Subject Matter

5. Claims 42, 49 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (703)306-5840.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.



Hanh Phan

Patent Examiner
Art Unit 2633

07/08/04

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